GENERAL NOTES

Goshawk predation on Sharp-tailed Grouse in the Nebraska sandhills.—There are few observations of Goshawks (*Accipiter gentilis*) preying on prairie grouse. Moran (1966. *Auk*, 83:137) observed a Goshawk kill a Greater Prairie Chicken (*Tympanuchus cupido*) in Wisconsin; this grouse was preyed upon in an area where it had taken refuge after being flushed from a booming ground. Ammann (1959. *J. Wildl. Mgmt.*, 23: 110–111) found a Goshawk feeding on a freshly killed male Sharp-tailed Grouse (*Pedioecetes phasianellus*) on a Michigan dancing ground; and Berger, Hamerstrom, and Hamerstrom (1963. *J. Wildl. Mgmt.*, 27:778–791) observed a Goshawk feeding on the hot carcass of a Greater Prairie Chicken on a booming ground in Wisconsin.

On 7 April 1966, I witnessed Goshawk predation on a Sharp-tailed Grouse on Display Ground 11 on the Bessey District of the Nebraska National Forest, Thomas County, Nebraska. The National Forest is located in the Sandhills and is described in a previous report (Blus, 1966. *Nebraska Bird Rev.*, 34:23–30). A male juvenile sharptail, which had flown from the display ground when I arrived by automobile at 6:15 AM, was taken by an immature hawk 100 yards from the display ground. The Goshawk, flying at an altitude of approximately 4 feet, hit the grouse on the ground. The grouse dragged the hawk for short distances on several occasions in attempting to escape. The hawk began to pull feathers from the breast of its prey about 10 minutes after the strike; the dead sharptail was taken from the hawk at this point.

In five years of prairie grouse study on the 90,000-acre National Forest, observations of seven single Goshawks and one pair were recorded; Goshawks were observed in four of the five years. Only two of these birds were seen in the 25,000 acres of planted coniferous plantations. In addition to the spring kill mentioned above, three hawks (a single and a pair) were observed feeding on two sharptail carcasses in winter; one hawk was relieved of a captured sharptail in winter; two were seen harassing sharptails on display grounds during spring; one was observed in late August flying over an area from which I flushed seven sharptails a few seconds previously; and one was not associated with either harassment or kill of Sharp-tailed Grouse. Karl Menzel (pers. comm.) rescued the captured sharptail mentioned above from a Goshawk in a coniferous plantation; the grouse was not seriously injured and was eventually released. Grange (1948. "Wisconsin Grouse Problems," p. 124) included the Goshawk among the most skillful grouse predators in Wisconsin; this also seems to hold true for Nebraska where Sharp-tailed Grouse are apparently among the preferred prey of this raptor.

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Regurgitation by Killdeer as a possible means of dispersal for seeds and aquatic organisms.—Gleason and Cronquist (1964. "The Natural Geography of Plants." Columbia Univ. Press, New York) suggest that transport via the external surfaces of waterbirds is the principal dispersal means for seeds of aquatic angiosperms. On the contrary, however, Schlichting (1960. *Trans. Amer. Microscopical Soc.*, 79:160–166) has found that mud and debris seldom remain on ducks suspended in air for more than 30 minutes. Resistant disseminules may be carried between aquatic habitats within the